Session 111 Track A Environmentally Sustainable Ecosystem Restoration Initiatives

Experiences in the Northwest Bob Willis

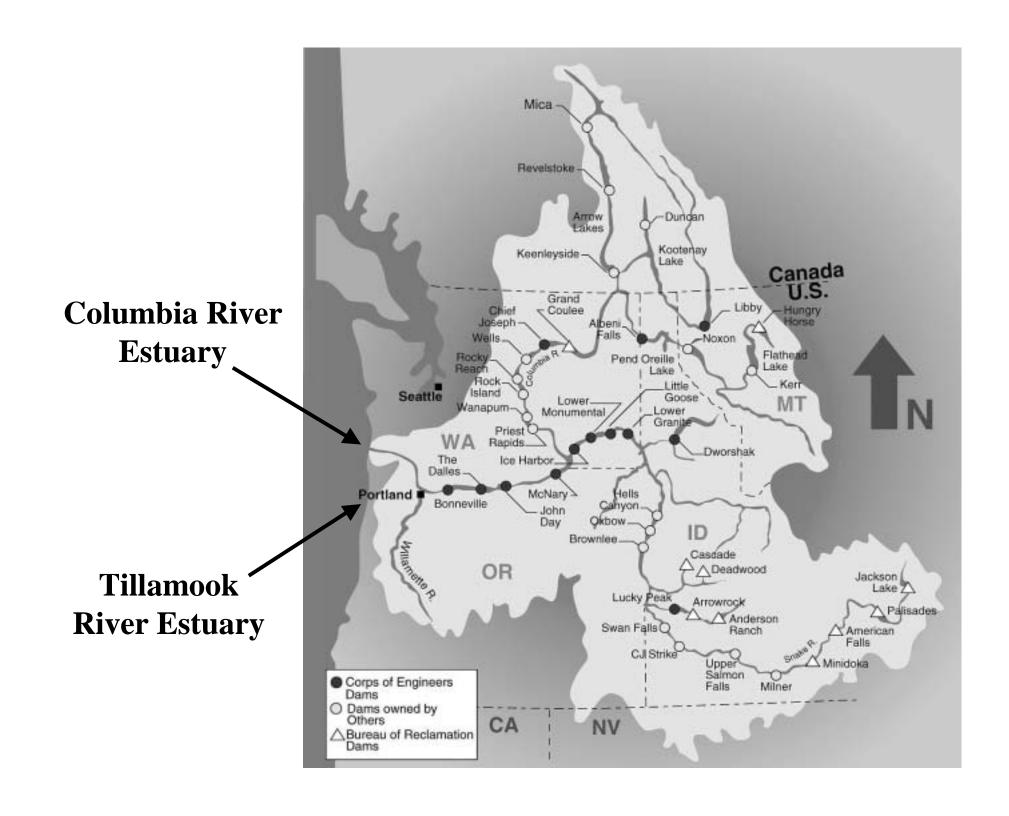
Portland District



Lower Columbia and Tillamook

Ecosystem Restoration

WRDA 2000 Sec. 536



History

- Estuary Planning
- Relationship to FCRPS
- Authority Development
- What to do

Lower Columbia Estuary Program



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Action 5: Restore 3,000 acres of tidal wetlands along the lower 46 River Miles to return tidal wetlands to 50 percent of the 1948 level.

Salmon Lifecycle Streambeds Ocean

Columbia River Fish Mitigation Program

- Hydro -All H
- CRI Model: Science, 3 NOV 2000
- 1999 WRDA §582

FCRPS Bi-Op (2000)

Action 160: The Corps and BPA working with LCREP, shall develop and implement an estuary restoration program with a goal of protecting and enhancing 10,000 acres of tidal wetlands and other key habitats over 10 years, beginning in 2001, to

How?

- Studies CRFM; others
- What Workshop, July 2001
- How
 - -CAP
 - -Sec. 536
 - -GI

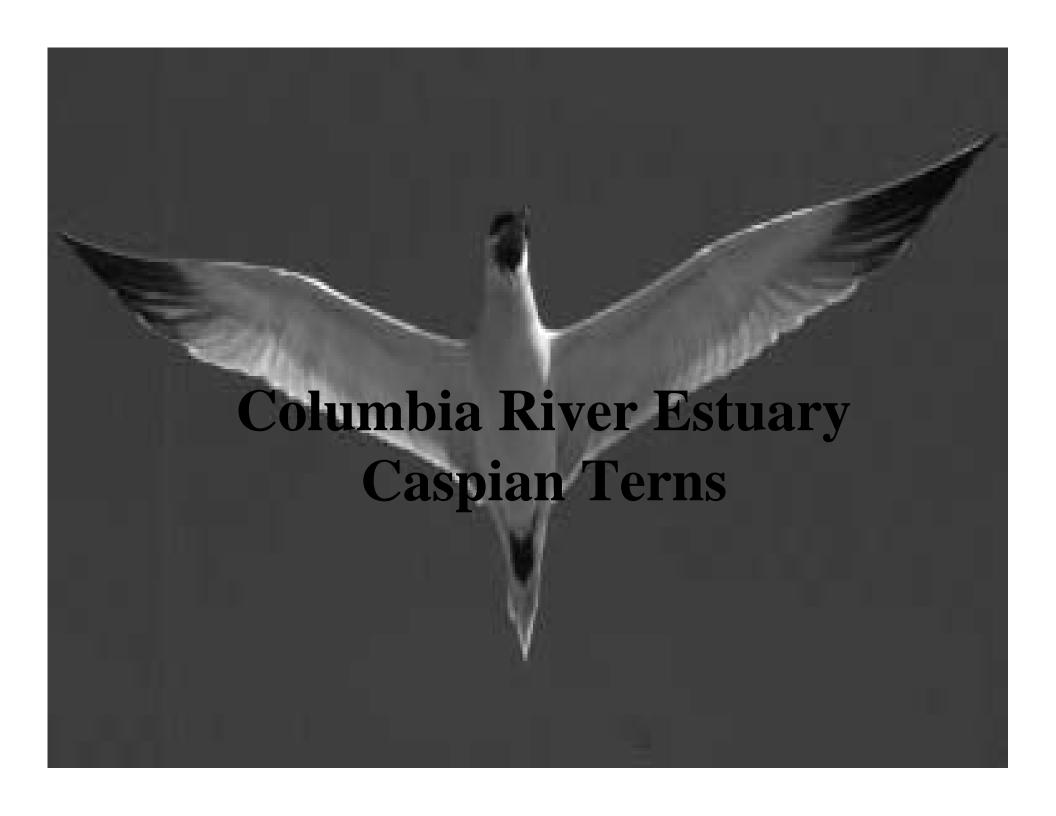
Lower Columbia River & Estuary Habitat Conservation & Restoration Workshop Proceedings





Iron Triangle vs. Matrix Issues

— 2003 New Start





U.S. Fish and Wildlife Service Pacific Region



National Marine Fisheries Service Northwest Region

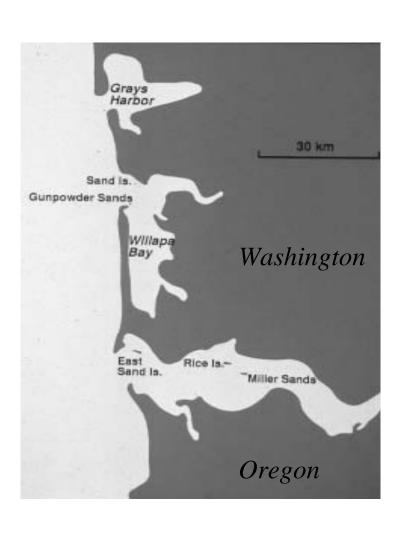


U.S. Army Corps of Engineers
Portland Division

Caspian Tern Issue



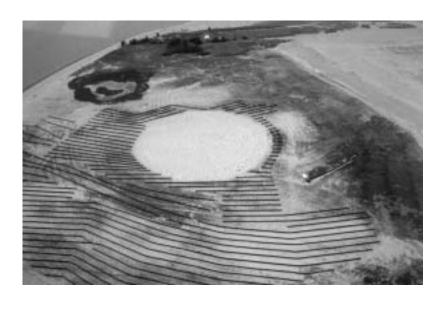
Columbia River Estuary Caspian Terns



- 1962 Rice Island Created
- 1984 East Sand Is. colony established with ~ 2000 birds
- 1986 Colony relocated to Rice Is. with ~ 2000 birds numbers increasing ~ 20,000
- 1995 NMFS BO Study
- 1999 Implement
- 1999 Pilot Study

1999 Pilot Relocation Study

Project Objectives: • Discourage Nesting at Rice Island



- Encourage nesting at East Sand Island
- Test Relocation Methods

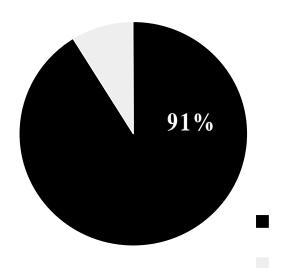
Monitor & Evaluate

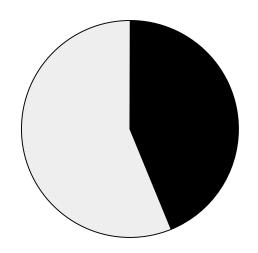
1999 Accomplishments



- Established a core nesting colony of 1,400 pairs on East Sand Island
- Refined relocation techniques
- Verified that relocation substantially reduced the % of smolts in the tern's diet.

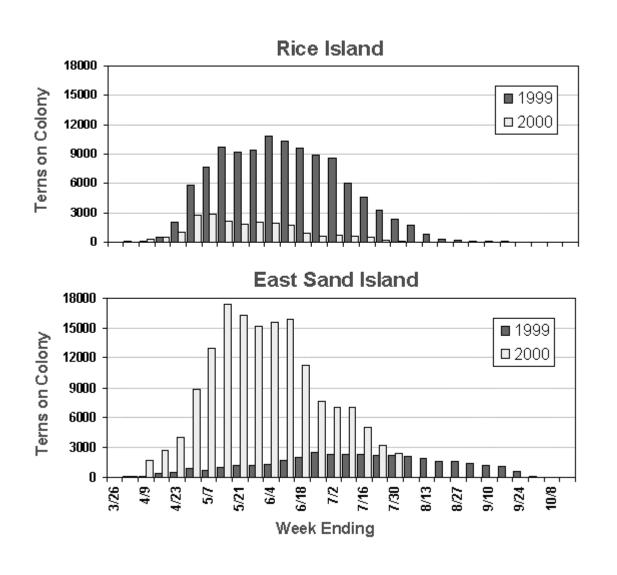
Diet Composition of Terns in 2000

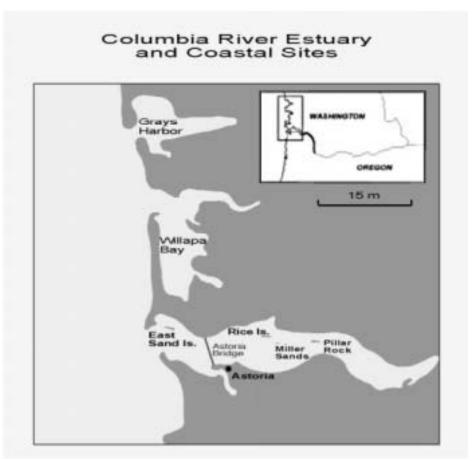




East Sand Island

Result of Moving Terns





- Total consumption by terns nesting in estuary in 2000 was 7.3 million salmonid smolts, or 6.4% of the 115 million out-migrating smolts that reached the estuary.
- Year 2000 tern relocation "saved" 6 million smolts, the estimated number of smolts that would have been consumed if all Caspian terns had nested on Rice Island.

Year 2001/2002 Actions

- 2001 Environmental Assessment Actions
 - Remove vegetation on 4 or more acres on East Sand Island
 - Lawsuit by ABC, Audubon, Defender's
 - Preliminary injunction prevents any action on Rice Island
- 2002 Actions
 - Permanent injunction : no action in estuary
- Worked with Department of Justice to settle out of court.

